



# *The Commonwealth of Massachusetts*

*Executive Office of Environmental Affairs*

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GOVERNOR

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SECRETARY

## DESIGNATION OF THE POCASSET RIVER AS AN AREA OF CRITICAL ENVIRONMENTAL CONCERN

Following an extensive public participation process and a formal evaluation of all assembled data, I, the Secretary of Environmental Affairs, hereby designate the Pocasset River as an Area of Critical Environmental Concern (ACEC) pursuant to the authority granted me by G.L. c. 21A, s 2(7).

I also hereby, find that the area of Pocasset River ACEC subject to the jurisdiction of the coastal wetlands regulations of the Wetlands Protection Act, G.L. c. 131, s. 40 is significant to flood control, the prevention of storm damage, the protection of land containing shellfish and fisheries; public interests protected by the Wetlands Protection Act.

I intend to review this designation one year after its effective date under the authorization and procedures established in Section 6.52 of the CZM Program regulations. At that time, I will review any other mechanisms, such as a conservation restriction, that have been legally enacted and which provides at least equal or greater protection to the natural resources of any section of the designated area. Should such restrictions, easements or other protective devices be enacted, I can seek in accordance with Section 6.52 of the CZM Program regulations to amend, repeal or adjust the designation accordingly.

### 1. Boundary of the Pocasset River ACEC

Within the tidal portion of the Pocasset River, the boundary for the Area of Critical Environmental Concern extends upriver from the easterly side line of Shore Road bridge crossing of the Pocasset River to the landward limit of tidal extent including all of the adjacent intertidal lands and lands within the 100 year flood line elevation (ELE. 14 FT, MSL DATUM). Above the limit of tidal extent, the boundary includes all of the connecting freshwater ponds, surface water courses and adjacent wetlands (as defined in c. 131, s. 40) from Mill Pond to the tributaries of Upper Pond. This boundary also includes a 100 foot setback distance that borders all of the above described freshwater ponds, surface water courses and adjacent wetlands.

### 2. Discussion of Factors Specified in Section 6.48 of the CZM Program Regulations

Prior to designation of a site as an Area of Critical Environmental Concern, I must consider the factors specified in Section 6.48 of the CZM Programs regulations.

These factors need not be weighed equally, nor must all of these factors be present for an area to be designated. While the more factors an area contains, the more likely its designation, the strong presence of even a single factor may be sufficient for designation. Based on information compiled during the public review process and on the opinions and comments expressed by local officials, residents and landowners, I find that the following factors are applicable to the Pocasset River:

a) Threat to the Public Health, Inappropriate Use:

Inappropriate development of the Pocasset River area may adversely affect the high water quality of this system, particularly in the freshwater ponds and springs. Construction in or near the ponds could increase suspended solid loadings to the detriment of aquatic plants and animals. Storm run-off from paved surfaces near the river could also degrade water quality. The loss of alteration of wetlands could remove a potentially important pollutant filtering mechanism for this entire watershed.

b) Quality of the Natural Characteristics:

The Pocasset River is characterized by a high level of water quality. In the area proposed for ACEC designation, the estuary has been classified as SA waters by the Massachusetts Division of Water Pollution Control. The freshwater portion of the river is classified as B waters. No known discharges from pipes occur within this proposed ACEC.

c) Productivity:

The Pocasset River estuary is a rich, productive coastal resource feature. This type of environment produces large amounts of organic material and helps promote the rapid cycling and availability of nutrients to organisms higher in the food chain. While the Pocasset River is a relatively small coastal stream, it offers a significant diversity of habitats for wildlife ranging from intertidal flats and marshes to small woodland ponds and forests.

d) Uniqueness of Area:

Regionally, the Pocasset River is of special interest because it offers actual and potentially excellent oyster habitat within its estuary. The upstream areas are also significant because the springs which feed the river system seldom freeze. This, in combination with its relative seclusion, offer an important source of freshwater during the winter to indigenous wildlife and migratory waterfowl. The proposed ACEC boundary for the Pocasset River also provides for the first time in Massachusetts the opportunity to designate almost an entire river and its adjacent wetlands as an ACEC. This boundary recognizes the river as an ecological system or unit. This is especially important where the volume and quality of freshwater inflow into the estuary appears to be critical in maintaining the existing faunal assemblage.

e) Irreversibility of Impact:

Significant alterations in water quantity or quality would be likely to seriously adversely affect shellfish populations in the estuary. Removing or altering the wetlands of the Pocasset River would contribute to the degradation of water quality as well as eliminate important wildlife habitat.

f) Economic Benefits:

In Bourne, shellfishing is a significant commercial and recreational enterprise. The Pocasset River contributes to the maintenance of this economic activity.

g) Supporting Factors:

The Town of Bourne considers the Pocasset River as an important natural resource. The area is identified in the Town Master Plan as an environmentally sensitive area, a key open space area and as land appropriate for conservation and/or parks. Also, adjacent to this area is the Town Forest, an important groundwater source of potable water for Bourne.

John A. Bewick  
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Secretary of Environmental Affairs

December 5, 1980  
Date